MARTIN COMPANY
BALTIMORE, MARYLAND

CONTRACT NAS 8-11555

SECOND QUARTERLY PROGRESS REPORT

FEBRUARY - APRIL 1964

(CODE)

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Introduction

This is the second Quarterly Progress Report to be submitted as required by contract NAS 8-11555.

Progress against the program plan is summarized below:

	Milestone	Schedule Date	Actual Date
1.	Receipt of Extrusions	12/31/64	1/3/64
2.	Receipt of First Machined Extrusion	1/31/64	2/15/64
3∙	Complete forming of First Unit	3/6/64	3/6/64
4.	Complete Heat Treat of First Unit	3/20/64	4/9/64
5.	Complete Shot Peening of First Unit	4/3/64	4/24/64
6.	Receipt of Tenth Machined Extrusion	4/10/64	4/8/64
7•	Complete Anodizing First Unit	4/17/64	-
8.	Start Tests of First Unit	5/8/64	-
9•	Complete Forming Tenth Unit	5/15/64	-
10.	Complete Heat Treat of Tenth Unit	5/29/64	-
11.	Complete Tests of First Unit	6/5/65	-
12.	Complete Shot Peening of Tenth Unit	6/12/64	-
13.	Complete LOX Cleaning of First Unit	6/19/64	-
14.	Complete Anodizing Tenth Unit	6/26/64	-
15.	First Unit on Dock MSFC	7/10/64	-
16.	Start Tests Tenth Unit	7/17/64	-
17.	Complete Tests Tenth Unit	8/14/64	
18.	Complete LOX Cleaning Tenth Unit	9/18/64	-
19.	Tenth Unit On Dock MSFC	9/25/64	-

It will be noted that, as predicted in the first Quarterly Report, the machining vendor was able to recover his schedule slippage. Milestone 7 was missed due to the original slippage but it appears certain that recovery will be made prior to completion of the tenth unit.

Discussion of Work Performed Buring the Quarter

The Pennsylvania Forge Company completed their subcontract for machining of the extrusions. Their performance was excellent in all respects.

Forming operations were initiated without difficulty and seven units were completed.

Some delay was encountered in adapting the internal tracking tool to the new lathe in order to insure proper alignment and operation. By the end of this quarter the internal machining of five units had been completed.

The METLAB Company initiated heat treating operations and have completed four units. Source inspection of the first unit revealed some rust particles imbedded in the outside surface of the bottle. These have subsequently been removed and were traced to loose rust flakes on the heat treat fixture. The vendor has sand blasted the entire fixture to insure removal of all rust.

The Metal Improvement Company initiated shot peening operations and have completed two units. No difficulties were encountered.

Anodizing will be done by the J. W. Rex Company, the vendor on the previous contract. Anodizing of the first unit was not accomplished this quarter.

At the request of MSFC personnel consideration was given to eliminating the dessicant holder used for protection during shipment. A design utilizing teflon plugs and pressurizing the bottle with dry nitrogen at 5-10 psi was presented to MSFC personnel. This design was approved and is now being fabricated. No change in funding or schedule will be involved.

Proposals were solicited from various sources capable of conducting the production acceptance tests. After study of the responses received it was decided to conduct these tests at Martin-Baltimore. Testing of the first unit is scheduled to start on 1 June 1964.

Discussion of Problems Encountered During the Quarter

No major problems were encountered during this quarter.

Work Planned for the Next Quarter

By the end of the next quarter it is anticipated that full schedule recovery will be made. A contract ammendment adding five units is anticipated during the next Quarter.